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| 10/788,801              | 02/27/2004  | Scott Musson         | ORACL-01382US0      | 7864             |
| 80548                   | 7590        | 04/19/2010           | EXAMINER            |                  |
| FLIESLER MEYER LLP      |             |                      | HASSAN, RASHEDUL    |                  |
| 650 CALIFORNIA STREET   |             |                      |                     |                  |
| 14TH FLOOR              |             |                      | ART UNIT            | PAPER NUMBER     |
| SAN FRANCISCO, CA 94108 |             |                      | 2179                |                  |
|                         |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/788,801             | MUSSON ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | RASHEDUL HASSAN        | 2179                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 December 2009.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,4-9,11-15,30,33-38,40-44 and 50-52 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,4-9,11-15,30,33-38,40-44 and 50-52 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/04/2009.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1, 4-9, 11-15, 30, 33-38, 40-44, and 50-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Independent claim 1 recites the limitation “***wherein the control tree factory can obtain an XML stream...***” in line 5. The use of the term “can” makes it unclear whether the limitation requiring obtaining the XML stream and parsing the XML stream into a DOM tree and other limitations associated with these steps recited afterwards are required by the claim or not. Dependent claims 4-9, 11-15, and 50-52 inherits the indefiniteness from the independent claim 1.

Independent claim 30 recites the limitation “***advance the control tree through at least one lifecycle stage in a sequence of one or more lifecycles, wherein at least one control in the control tree operates to interact with and produce a response based on the request***” (emphasis added). It is unclear as to the at least one control in the control tree interact with what. It does not appear that the control interacts

with the request, since the claim mentions “based on the request”. Dependent claims 33-38 and 40-44 inherits the indefiniteness from the independent claim 30.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1, 4-9, 11-15, 30, 33-38, 40-44, and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anuff et al. (US 6,327,628 B1) hereinafter Anuff, in view of Broadbent et al. (US 2001/0037287 A1) hereinafter Broadbent.**

For claims 1 and 30, Anuff teaches a computer implemented ***method for supporting a portal application, comprising:***

***accepting a request, at a container on one or more web servers, from a user that interacts with a graphical user interface (GUI) of a web application at a client side*** (e.g., accepting a request from a browser in a client device 10 sent to a portal server, i.e., to a container, on one or more of the servers 12a-12n . See Fig. 1, c3:1-24, and also c4:15-45);

***mapping the request to a control tree factory...*** (e.g., to the process management services that are provided by a web server and suitable class libraries. See c4:15-45);

***...generating a control tree in the container by the control tree factory... based on the request*** (e.g., the “control tree” is interpreted to mean relevant instantiated class objects implementing the requested GUI together with their interrelationships with each other as illustrated in Fig. 4 in Anuff. Thus clearly these class objects are generated within the web server by the process management services mentioned above), ***wherein the control tree is a logical representation of the graphical user interface (GUI), wherein the control tree includes a set of controls, each of which represents at least one of a graphical element and a functional element in the GUI;*** (i.e., The claim defines a “control tree” as “a logical representation of the graphical user interface (GUI)”. According to the instant disclosure, “controls” represent “corresponding graphical and functional elements in web applications ... In

one embodiment, a control can be implemented as one or more classes in an object oriented programming paradigm". Emphasis added, see [0028]. Therefore, "a *control*" is a "class" (in object oriented programming paradigm, hereinafter referred to as OOP) which is a logical representation of a corresponding graphical and functional element in a web application. In other words, the "*control tree*" is a collection of classes associated with a GUI that provide either a graphical element or a functional element in the GUI, since these classes can be seen as a logical representation of the GUI. Anuff teaches, with regard to Fig. 4, that back end controls/objects that either provides a graphical element and/or some functionality to the GUI);

***advancing the control tree through at least one lifecycle stage in a sequence of one or more lifecycles...*** (e.g., for a control, the lifecycle is defined in the instant disclosure, by a set of methods representing stages in the lifecycle. Life cycle stages are illustrated in Table 3 and appear to be nothing more than various stages of an object, instantiated from a class in the context of OOP, during runtime. Therefore, Anuff's controls for generating a portal GUI, implemented using objects in OOP, inherently advances the objects implementing the GUI through at least one lifecycle stage, e.g., at least the "Init" stage that allows a control to perform initialization based on interaction with each other in order to produce the response, i.e., the GUI, based on the request),

***aggregating the output of each control of the set of controls in the control tree to produce a response based on the request*** (e.g., Anuff implicitly teaches that

the results of the processing output of each control is aggregated to produce the GUI of the portal application as illustrated in Fig. 2); **and**

***providing the response to the GUI*** (e.g., see the GUI of Fig. 2 provided to the client application).

Anuff however does not explicitly teach ...***wherein at least one control in the control tree operates to interact with another control in the control tree through an event notification mechanism.*** He explicitly teaches that an object model comprises a collection of objects that work together in documented relationships. See Fig. 4. But, he does not explicitly teach that controls communicate through an event notification mechanism. However, in object oriented programming, communication/co-operation between objects using events was well known in the art at the time of the invention. Therefore, if not already implicitly taught by Anuff, it would have been obvious to a person of ordinary skill in the art to modify his invention so that controls can raise events and respond to events. The motivation for such modification would have been necessitated by the very nature of the GUI (portal) which is an interactive application and it is well known to a person of ordinary skill in the art that such applications are well suited for an event-driven implementation. For instance, Broadbent teaches a portal application that utilizes event notification mechanism in implementing the portal application service (see [0320], [0398], [0402], and through out the reference).

Anuff also does not teach ...***wherein the control tree factory can obtain an XML stream from different sources and parse the XML stream into a Document***

**Object Model (DOM) tree** and to generate the control tree **from the DOM tree** by **processing the DOM tree** as now required by the claim. However, Broadbent teaches parsing XML stream into a DOM tree as part of providing the portal application service (see [0317]).

The Examiner notes that the portal application in Anuff can be designed or implemented to perform any type of functionalities commonly known to a person of ordinary skill in the art at the time of the invention was made. In the same field of invention, Broadbent teaches a portal application for a mortgage loan management system. Therefore, it would have been obvious to a person of ordinary skill in the art having the teaching of both Anuff and Broadbent before him/her at the time of the invention to implement a portal application that incorporates the functionality of the portal application taught by Broadbent, since such a combination is not the result of novelty but of ordinary skill. Additionally the motivation for combining would have been to provide Broadbent's portal application that addresses a need as discussed in the background section of the reference using the modular portal implementation technique of Anuff to benefit from the advantages as discussed in the background section of the reference.

For claims 4 and 33, Anuff further teaches **wherein the step of generating a control tree comprises: creating a metadata representation of a control tree; and generating a class to construct the control tree based on the metadata representation.** (See c6:34-46.)

For claims 5 and 34, Anuff further anticipates ***wherein the request is a hypertext transfer protocol request (HTTP); (See c6:57-58) and the request originates from a web browser.*** (See 16 in Fig. 1.)

For claims 6 and 35, Anuff further teaches ***providing the response to a web browser.*** (See Fig. 1, Fig. 2, c13:53-55)

For claims 7 and 36, Anuff further teaches ***wherein the control tree is advanced through the at least one lifecycle stage by an interchangeable lifecycle component.*** (Regarding an “interchangeable lifecycle component” the disclosure mentions, in regard to Fig. 8, “The control container can use an interchangeable lifecycle driver 804 to drive the control tree through a sequence of states so that the request can be processed. As with the interchangeable persistence driver, an interface is provided to isolate lifecycle driver implementation details from the control container. This allows for different lifecycle implementations to be interchanged as needed”. As for what constitutes the “interchangeable lifecycle driver/component”, a reasonable interpretation would be, in absence of any explicit definition of the term in the disclosure and without importing limitations from the disclosure into the claim, to be objects/processes arbitrarily combined or divided into separate software, firmware or hardware components responsible to instantiate and carry out the run-time processing

of the relevant classes/objects implementing the requested GUI which is inherent in Anuff.)

For claims 8 and 37, Anuff further teaches ***wherein each one of the set of controls can have an interchangeable persistence mechanism.*** (Anuff teaches object persistence using suitable database interface. See c4:16:32 and c5:45-48.)

For claims 9 and 38, Anuff further teaches ***wherein each one of the set of controls can render itself according to a theme.*** (See c8: 22-49.)

For claims 11 and 40, Anuff further teaches ***wherein one of the set of controls can advance through the series of at least one lifecycle stage in parallel with another of the controls.*** (Since in OOP, objects can be instantiated in parallel and individually carry on their run-time processing in parallel with another object. Anuff also teaches multithreaded module preparation, c14:31-41.)

For claims 12 and 41, Anuff further teaches ***wherein a lifecycle stage is one of: init, load state, create child controls, load, raise events, pre-render, render, save***

**state, unload and dispose.** (Implicitly taught since objects apparently follow these stages in OOP which is well known to a person of ordinary skill in the art.)

For claims 13 and 42, Anuff further teaches **wherein the response is a hypertext transfer protocol (HTTP) response.** (See c6:61-65.)

For claims 15 and 44, Anuff further teaches **wherein each one of the set of controls can be one of: Book, Page** (see c4:65), **Window, Menu, Layout** (see c4:66), **Portlet** (modules, c4:65), **Theme, Placeholder, Shell, LookAndFeel, Desktop, Body, Footer, Header, Head, Titlebar, ToggleButton, TreeView, TreeViewWithRadioButtons.**

For claim 14 and 43, Anuff does not explicitly teach that controls can raise events and respond to events. However, this limitation has been already addressed in the rejections of claims 1 and 30 with respect to the event notification mechanism. Therefore, this claim is also obvious over Anuff in view of Hough based on the same rationale as already discussed in the rejection of claims 1 and 30 hereinabove.

For claim 50, Anuff further teaches that ***the one or more lifecycles of the control tree is provided and managed by the container and can be modified by the container*** (since, the controls in Anuff are provided and managed by the web server to which the controls belong), ***and one or more controls in the control tree can save their states at a particular stage in the one or more lifecycles and can then reload these states at a later stage in the one or more lifecycles*** (i.e., this limitation has to do with object persistence which is taught by Anuff. See c4:25).

For claim 51, Anuff further teaches ***wherein: each container associates a context object with the control tree factory, wherein each context object provide access to the protocol and application framework that is associated with the container*** (see “PortalPageContext” 34 in Fig. 4).

For claim 52, the combination further teaches ***the control tree factory uses one or more meta data to construct statically created controls at initialization of the control tree, wherein dynamically created controls are created in the control tree in reaction to state, context, and events during a control tree lifecycle*** (e.g., see Anuff c4:33-35, wherein a default web site is provided containing statically created controls. It is well understood by one of ordinary skill in the art that the portal web site then can dynamically create other controls based on user interaction or generated events during the execution of the portal application).

***Relevant Prior Arts***

Following is a list of prior arts considered relevant but not relied upon in the rejection above:

Shiigi et al. (US 20030014442 A1), Girardot et al. (US 20030023628 A1), Burkett et al. (US 6,671,853 B1), Junghuber et al. (US 2004/0133660 A1), Zang et al. (US 2006/0282451 A1).

***Response to Arguments***

Applicant's arguments with respect to claims 1, 4-9, 11-15, 30, 33-38, 40-44, and 50-52 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RASHEDUL HASSAN whose telephone number is (571)272-9481. The examiner can normally be reached on M-F 7:30AM - 4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rashedul Hassan/  
Examiner, Art Unit 2179